U.S. Patent Application No. 10/552,402 Attorney Docket No. 10191/4460 Reply to Office Action of May 28, 2009

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF THE CLAIMS:

- 1-13. (Canceled).
- 14. (Currently Amended) A method for controlling a driver-assistance device, comprising: evaluating measured quantities, to be recorded by sensors, for triggering a reaction; determining measuring instants through repeating cycles for acquiring and evaluating the measured quantities, each of the repeating cycle having a cycle time tz; and determining whether a triggering criterion is reached, and

if so,

sending a trigger to the driver-assistance device, and if not, then

predicting a triggering instant, and.

determining whether one of the measuring instants situates

immediately after the triggering instant, and

if so, repeating the evaluating of the measured quantities, and if not, then controlling the adjusting the cycle time tz for subsequent measuring instants so in such a way that one of the measuring instants follows as immediately as possible an instant at which there are measured quantities that give rise to a triggering.

- 15. (Previously Presented) The method as recited in Claim 14, wherein the measuring instants are controlled as a function of a prediction of the instant.
- 16. (Currently Amended The method as recited in one of Claim 14, wherein an algorithm that is faster for the predicting is finished prior to when the instant than for triggering starts the reaction is used.

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- 17. (Currently Amended) The method as recited in Claim 14, wherein the cycle time tz of the measuring instants are controlled is adjusted by altering a run length of a computer program for evaluating measurement data.
- 18. (Previously Presented) The method as recited in Claim 17, further comprising: altering the run length is altered via a number of refresh cycles.
- 19. (Previously Presented) The method as recited in Claim 14, wherein the reaction is an intervention into a guidance of a vehicle.
- 20. (Previously Presented) The method as recited in Claim 14, wherein the reaction includes a warning signal.
- 21. (Previously Presented) The method as recited Claim 14, wherein the reaction includes an occupant restraint measure.
- 22. (Currently Amended) A system for controlling a driver-assistance device, comprising: an arrangement for evaluating measured quantities, to be recorded by sensors, for triggering a reaction;

an arrangement for determining measuring instants through repeating cycles for acquiring and evaluating the measured quantities, wherein each of the repeating cycles has a cycle time tz; and

an arrangement for <u>determining whether a triggering criterion is reached, and</u>
<u>if so,</u>

sending a trigger to the driver-assistance device, and if not, then

predicting a triggering instant, and

determining whether one of the measuring instants situates
immediately after the triggering instant, and

if so, repeating the evaluating of the measured quantities, and
if not, then controlling the adjusting the cycle time tz for subsequent
measuring instants so in such a way that one of the measuring instants follows

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as immediately as possible an instant at which there are measured quantities that give rise to a triggering.

- 23. (Currently Amended) The system as recited in Claim 22, wherein the cycle time tz of the measuring instants is adjusted are controlled as a function of a prediction of the instant.
- 24. (Previously Presented) The system as recited in Claim 22, wherein at least one of the sensors is a radar sensor.
- 25. (Previously Presented) The system as recited in Claim 22, wherein at least one of the sensors is a video sensor.
- 26. (Previously Presented) The system as recited in Claim 22, wherein at least one of the sensors is a lidar sensor.
- 27. (Previously Presented) The system as recited in Claim 22, wherein the measuring instants are controlled as a function of a prediction of the instant, and wherein at least one of the sensors includes at least one of a radar sensor, a video sensor and a lidar sensor.
- 28. (Previously Presented) The method as recited in Claim 14, wherein the measuring instants are controlled as a function of a prediction of the instant, wherein the measuring instants are controlled by altering a run length of a computer program for evaluating measurement data, and wherein an algorithm that is faster for predicting the instant than for triggering the reaction is used.
- 29. (Previously Presented) The method as recited in Claim 28, wherein the run length is altered via a number of refresh cycles, and wherein the reaction includes at least one of an intervention into a guidance of a vehicle, a warning signal, and an occupant restraint measure.
- 30. (Previously Presented) The method as recited in Claim 17, wherein the run length is altered via a number of refresh cycles, and wherein the reaction includes at least one of an intervention into a guidance of a vehicle, a warning signal, and an occupant restraint measure.

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## 31. (Previously Presented) The method as recited in Claim 14, wherein:

the sensor signals are preprocessed to be available in an evaluatable form as measurement data for later evaluation,

the measurement data are transferred to a plurality of program for evaluating the measurement data, each of the programs requiring a processing duration, and the processing durations add up to one cycle time,

following the evaluation, if a triggering criterion is reached, a specific reaction is triggered, and the measuring cycle is repeated, and if the triggering criterion is not reached, a prediction of triggering instants is subsequently performed,

if one of the measuring instants to be expected using a previously set cycle time is favorably situated for the predicted triggering instant, the previously set cycle time remains unchanged and the program is repeated, and if the measuring instant is not favorable, the cycle time is adjusted to provide an altered cycle time, and the program is repeated with the altered cycle time.

## 32. (Previously Presented) The method as recited in Claim 31, wherein:

the measuring instants are controlled as a function of a prediction of the instant, in a phase approaching a critical situation in which no reaction may take place, a phase position of the measuring instant is suitably adjusted based on an estimation of a most probable scenario,

the instant is predicted faster than for a triggering of the reaction, wherein estimates of the instant are performed early on, and wherein in the event of a false estimation, only an attainable advantage is reduced if an adjustment of the phase position does not optimally succeed,

the phase position is adjusted by lengthening or shortening the cycle time, and the control of the measuring instants is implemented by altering a run length of the computer programs for evaluating the measurement data via a number of refresh cycles.

33. (Previously Presented) The method as recited in Claim 32, wherein the cycle time being shortened or lengthened to reduce or expand one of a measured-quantity resolution, a visual range of the sensors, or a number of objects to which attention is given for attention control, wherein at least one of the following is satisfied: the reaction is an intervention into guidance of the vehicle; the reaction includes a warning signal; and the reaction includes an occupant-

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restraint measure, and wherein the sensors include at least one of a radar sensor, a video sensor, and a lidar sensor.